Electronic Discharge Monitoring Reporting (E-DMR) System

Facility User's Guide

Presented to:

Virginia Department of Environmental Quality

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Revision Date: March 23, 2009

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Table of Contents

1   Introduction

1.1   Electronic Reporting and the e-DMR System:

The Virginia DEQ Electronic Discharge Monitoring Reporting (e-DMR) System is a Web and XML-based information system that allows wastewater facilities to electronically send Discharge Monitoring Reports (DMRs) to Virginia. This system is designed to provide an alternative to submitting hand-written or paper-based Discharge Monitoring Reports that is faster, more efficient, and less burdensome for both the regulated facilities and the Department. As a fully operational electronic reporting system, all of the necessary legal, security, and electronic signature functionalities have been included for this system to serve as a completely paperless reporting system.

1.2   E-DMR System Goals and Benefits:

There are a number of beneficial goals that have been considered and which have guided the development of the e-DMR System. Among them are:

- Support online availability of up-to-date DMR reporting requirements and tracking status of submitted DMRs.
- Improve the accuracy of compliance data by eliminating potential errors that would otherwise be introduced through manual data entry.
- Improve the security of DMR submissions from wastewater facilities.
- Reduce the wastewater discharge facility's compliance costs by offering a streamlined reporting method using readily available computer tools.
- Save the Virginia DEQ administration and compliance costs by reducing, and eventually better utilizing resources required for managing paper-based DMR reports.
- Improve the overall effectiveness of the Virginia wastewater discharge program with faster responses for data analyses, compliance assessment, enforcement support, and decision-making.

1.3   Overview of the e-DMR System:

The e-DMR System is a Web-based application accessible to the participating wastewater facilities via the Internet. The system will serve as an electronic file cabinet to manage DMR reporting requirements provided by the Virginia, and to receive/store DMR reports submitted by wastewater facilities.

Wastewater facility access privileges are administrated through the use of a PIN, username, and password. All DMR submissions are verified via PIN authentication with software security to ensure that the content of the data is original, truthful, legitimate, and unaltered. A complete chain-of-custody of all records will be maintained in the e-DMR server.

The system makes available up-to-date reporting requirements from the Virginia centralized data system, allowing wastewater facilities to submit original or revised DMRs, and allows for reviewing previously submitted reports on-line.

DMRs received at the Server are uploaded to the Data Exchange System for use by the Virginia DEQ to support compliance, permitting, and environmental planning programs.

2 Minimum System Requirements

Wastewater facilities will need to have the ability to access the Department's e-DMR System web site through the Internet. Typically, such access is available either through a dedicated connection through the wastewater facilities local area network or through a modem connection to an Internet Service Provider.

In addition to the Internet connection, the wastewater facility will need an Internet browser program. The e-DMR application is verified to work with Microsoft Internet Explorer Version 6.0 or greater, which can be downloaded for free from http://www.microsoft.com/downloads. Facilities may find that other Internet browsers may work but the Department cannot ensure that all of the features of the e-DMR web system will be available.

In summary, to use the e-DMR system, an e-DMR facility participant will need:
- A Computer/Laptop
- Internet Access
- Microsoft Internet Explorer, version 6.0 or greater

3 E-DMR System Description

As with a typical paper-based DMR submission process, the e-DMR electronic submission process is surrounded by a number of procedures that guarantee that the available information is up-to-date and accurate. The typical e-DMR submission process performed by a wastewater facility is provided below:

Abbreviated e-DMR Submission Process:

Step 1: Facility user logs into the e-DMR System via the Internet with user ID and password that has been emailed to them.

Step 2: Using the **Create a New Report** screen, user selects a working facility, permit number, and reporting period.

Step 3: Facility user previews and prepares e-DMR data file in accordance with reporting requirements using one of three methods.

- Step 3A: Downloading an XML template file that includes the facility's reporting requirements and generating their own submission file using the preformatted XML file format.

- Step 3B: Completing the online entry web form and generating a submission file. The file may be saved locally for later submission.

- Step 3C: Copying and pasting data into the online web form and generating a submission file. The file may be saved locally for later submission.

Step 4: If in step 3, the facility saves the DMR file locally, facility selects the DMR file, certifies its contents and submits it to the e-DMR Server. If step 3B or 3C are chosen, submission can be made using a Submission Wizard process.

Step 5: The Server receives the file, and issues a receipt of confirmation to the facility on the screen. A separate receipt confirmation email will be automatically sent to the sender. The Server verifies that the data file conforms to reporting requirements stored in the Server. If it does, the submission is noted as such on the Server for reference. If not, the submission will be noted as 'rejected' and the facility will be notified via email. The facility must cure the problems and submit revisions to the e-DMR Server. In any case, an email is sent to the certifier stating the status of the submitted DMR.

Step 6: Valid DMR submissions can be viewed and printed at any time.

4   Using the E-DMR System:

Virginia e-DMR Website Login

By using an Internet connection, and Internet Explorer version 6.0 or higher, an e-DMR facility participant logs into the e-DMR System website. After entering the appropriate website address, the participant is greeted by the login screen. To enter the System, the facility participant will have to enter a valid user ID and password on the e-DMR System Login screen shown below.

If a user logs in using the user ID and password received from Virginia DEQ to login for the first time, the system will prompt the user to select a new password as shown below. The new user defined password must consist of 8-15 alphanumeric characters (i.e. A-Z, a-z, and 0-9).

Note that access to the e-DMR System will only be allowed after the password has been changed.

After a valid user ID and password is entered, the user is brought to the DMR module home page, which provides a brief description of the system, and highlights any e-DMR related announcements from the DEQ e-DMR Administrator.

Before proceeding, we will be taking a closer look at the layout of the application as a whole, starting with the status bar.

The status bar is intended to provide quick access to user information, system help, and general system functions.

- Towards the right part of the status bar, the Home icon allows the user to return to the DMR module home page, described above.

- The user can access online help by clicking on this icon.

- Once finished using the e-DMR System, the user may log out using this icon. The username of the current logged-in user is also displayed in parenthesis.

To continue on with the layout of the application, the function bar is located in the frame to the left of the main area of the screen. Each functional area is highlighted below.

Under Report Management are the following topics:

- The Create a New Report icon leads to the heart of the e-DMR System. Up-to-date reporting requirements can be viewed, printed, and downloaded here. Also, web forms that look very similar to the paper DMR can be used to enter data. Much of this document will focus on this functional area.

- By clicking on the Edit an Open Report icon, a user can make changes to or delete a report that is currently in progress of being edited, but has not yet been certified and submitted to DEQ.

- By clicking on the Upload XML Report icon, a user can select and upload a DMR file in XML format that has been generated in compliance with the e-DMR XML schema. Before submission, the submission files can be tested for completeness and compliance with the e-DMR schema.

- DMR files that have been submitted to DEQ can be viewed and downloaded by clicking on Submittals/Revision. Submissions can be viewed and searched by submission ID, facility, permit, and date.

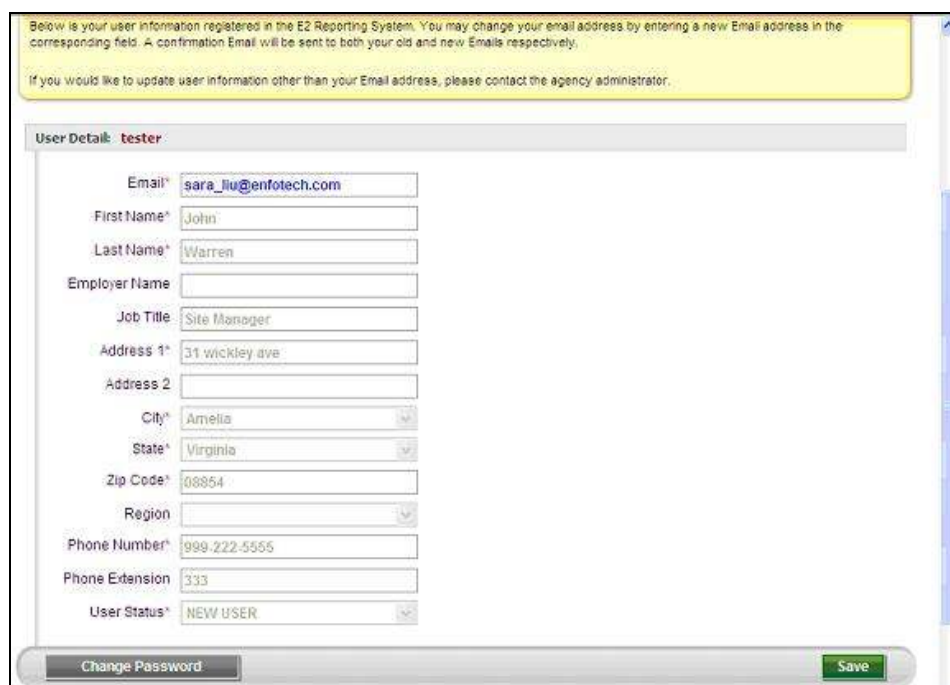Under My Account are the following topics:

- **Basic Information**   The user's general account information can be seen by clicking on Basic Information. Email address and Password changes can be made in this section.

- **Facility Association**   Facility Information functions, such as viewing the facilities that the user is associated with, the user's role in reference to that facility, and additional reporting requirements for the facility, are available by clicking on this icon.

4.1   View My Account Information:

The My Account section provides two important features. The first is the ability for the user to view their user information, and edit portions of this information such as their email address and login password. The second feature is the ability to view the facilities that the user is associated with in the system.

4.1.1   Basic Information:

To view and edit user information, select the [Basic Information] icon. This will provide a link to the following page:
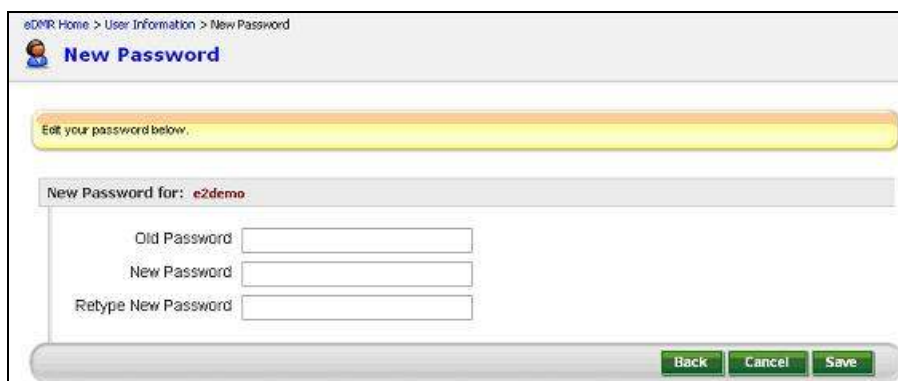

Most of the information on this screen is read-only, based on DEQ's records and information supplied when registering for e-DMR reporting. The user can change their email address by entering a new address in the Email field and pressing the Save button. To ensure system security, a confirmation email will be sent to the old and new email addresses.

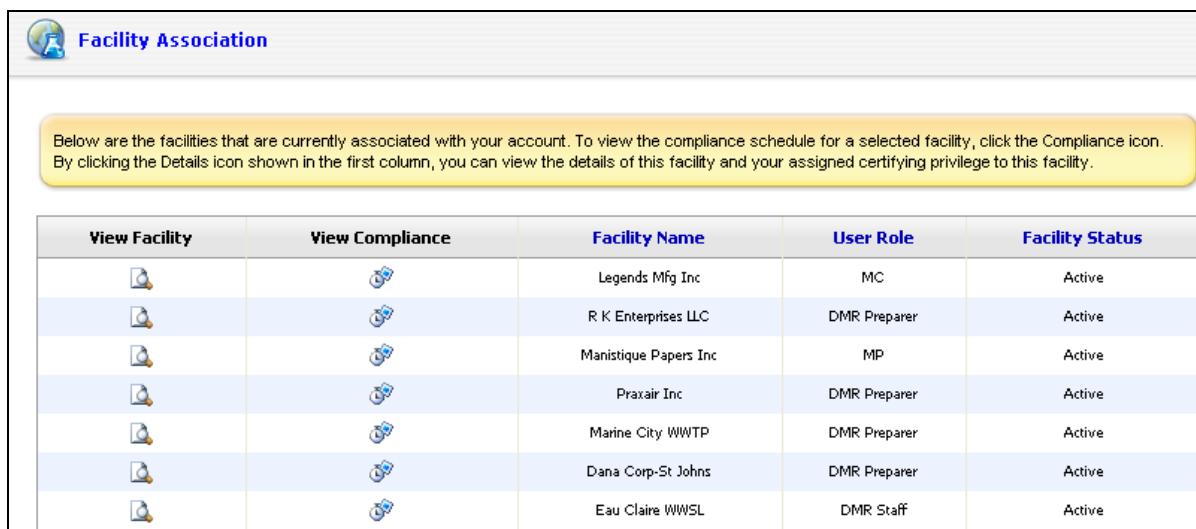To change the password, click the Change Password button [Change Password]. This will prompt the following screen.

The rules for password changes are the same as in Step 1, the new user defined password must consist of 8-15 alphanumeric characters (i.e. A-Z, a-z, and 0-9). The new password will also be emailed to your email address.

4.1.2   *Facility Association:*

In order for a user to be able to submit DMR reports, the user must be associated with a facility. This is accomplished by submitting a Facility Participation Package to DEQ. Please contact DEQ to obtain this documentation. Once DEQ receives and approves the application, the user accounts will be created and the user will be associated with the appropriate facility. To view the facilities that you are currently associated with, click on the Facility Association button [Facility Association] .

This loads a screen that provides list the facilities that the user is currently associated with:

The e-DMR System allows users to be associated with multiple facilities, each of which will be listed here. To obtain further information about a facility, click on the View Facility icon , which will display the Facility Association Details screen.

This screen will display general information about the facility such as its address and its current eDMR reporting status. If the facility can no longer submit DMRs electronically to the DEQ, its status will be displayed as either "Inactive" or "Suspended".

The user can also view the facility's compliance schedule by selecting the Compliance icon from the Facility Association screen.

The user can search the status of a compliance schedule by selecting "Completed" or "Not Completed" from the drop down menu.

eDMR Home > Facility Association > Additional Reporting Requirements

Additional Reporting Requirements

DISCLAIMER: The compliance schedule listed below is not a substitute for the actual permit requirements, but it is intended as a helpful tool for tracking and implementation of the permit requirements. You are responsible for reviewing the permit and ensuring all requirements are met.

Additional Reporting Requirements: **Boston Water and Sewer STP – New Facility**

Status Not Completed

Permit Number VA0088749

Back   Search

Schedule Name	Due Date	Received Date	Complete Date	Outfall
CORRECTIVE ACTION PLAN				
OBTAIN CTC				
SCHEDULE OF COMPLIANCE - ACHIEVE COMPLIANCE (W/I 4 YR EFF DATE)				001
SUBMIT FORM 2E (W/I 2 YR EFF DATE)				
WATER QUALITY STANDARDS - SEMIANNUAL MONITORING				

This screen will display all additional reporting requirements that the facility may face as a result of a compliance schedule. The name of the compliance schedule item, its due date, received date (if it has been received), completed date, and outfall (if applicable) are displayed.

Disclaimer: The compliance schedule information listed on this screen is intended as a helpful tool for tracking and implementation of the permit requirements, but it is not a substitute for the actual permit requirements. The facility responsible official is responsible for reviewing the permit and ensuring all requirements are met.

To return to the Facility Information screen, click on the Back button, or click on the Facility Association icon in the functional area to the left.

4.2   Creating and Submitting DMR Reports

The e-DMR System provides three primary methods to allow facilities to submit their DMR reports. These methods are:

- **Online data entry:** An online Report Wizard will guide the user through entering their DMR results online through a series of Web pages.
  This option is ideal for facilities that currently do not use a spreadsheet or database program to store or track their DMR results and can therefore use the e-DMR application to directly enter their DMR results.
- **Copy and Paste Using Excel Template:** The user can download a blank Excel file from the e-DMR system that contains the parameters that the facility must report. The facility can then use this spreadsheet to enter in their DMR results while being disconnected from the Internet. Then, when the user is ready to submit to DEQ, he or she can copy the data from the Excel file and paste this information into the Web form.
  This option is ideal for facilities that currently use a spreadsheet program such as Microsoft Excel to store or track their DMR results. Using the Copy and Paste approach allows the facility to avoid needing to "double enter" their DMR results.
- **XML File Upload:** The user can download a blank XML file from the e-DMR system that contains the parameters that the facility must report. The facility can then use this blank XML template file to enter in their DMR results while being disconnected from the Internet. Then, when the user is ready to submit to DEQ, he or she can upload the XML file including DMR results directly to DEQ.
  This option is ideal for facilities that currently have a comprehensive system to track their DMR results and have the IT resources to create a converter that converts their DMR results into the electronic XML format required by DEQ.

To begin to submit a report using any of the three options above, the user will want to first click on the Create a New Report icon in the functional area to the left which will bring up the Create a New Report screen, as shown here:

This screen by default will display all DMRs that are due for the current month for the facilities for which the user has some association. One row will be displayed for each DMR report that must be submitted.

To accommodate the possibility that a user will be submitting DMR results for more than one facility, the system allows a user to be associated with multiple facilities.[1] The user can select the registered facility on the drop-down pick list to filter out the DMR reports for that facility. Only those facilities that the user is associated with, either as a certifier, preparer, or viewer, will be displayed in the drop-down.

The user can also filter the DMRs by permit number or monitoring period. After the filtering criteria are entered, the user can click the Search button to filter the results.


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[1] An example could be a consulting firm reporting for multiple individual permitted facilities using only one user ID and password.

Each row in the table represents a DMR that must be submitted. In addition to general information about each DMR report (such as the Facility for which it applies, the reporting frequency, and reporting period) four reporting function tasks can be performed for each search result.
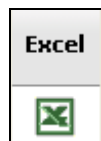
- Enter data through an Online Entry form (used for the online data entry submission option)

- Download a template XML file by clicking on the XML icon (used for the XML file submission method)
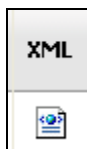
- Download a template Excel file by clicking on the Excel icon (used for the Excel copy-and-paste submission method)

- Preview a reporting requirement by clicking on the View Form icon. This is similar to viewing a blank DMR form that displays the reporting requirements and limits, but does not yet display the DMR results.
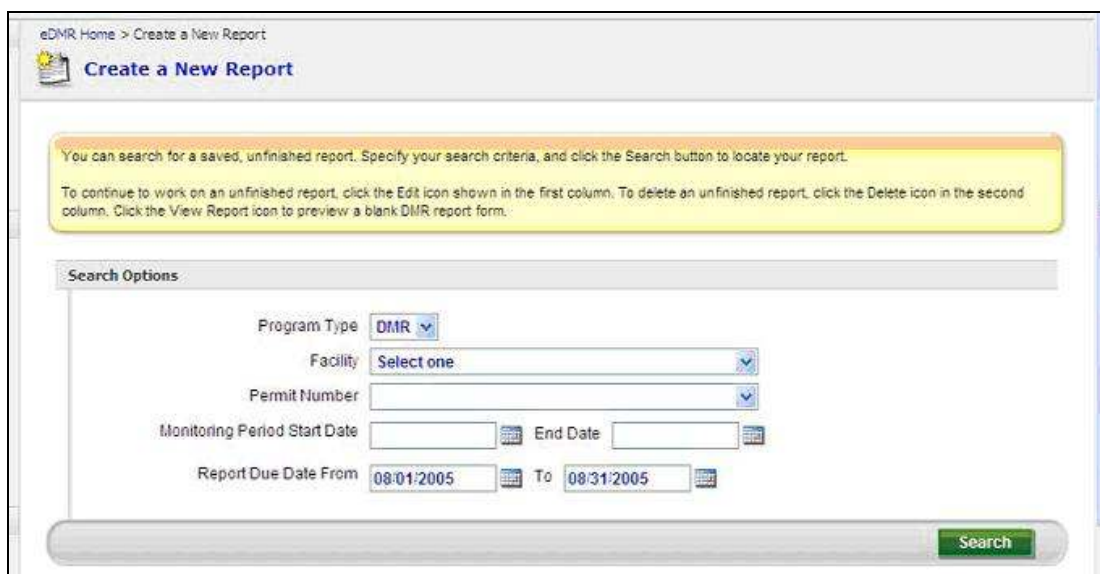

The following sections describe the procedure to submit DMRs using each of the three available options:

4.2.1   Submitting Reports Using the Online Data Entry Features

Step 1: Viewing Your Reporting Requirements (optional)

To begin to submit a report using the online data entry features, first click on the Create a New Report icon in the functional area to the left which will bring up the Create a New Report screen, as shown here:

To filter the results, select a facility using the drop-down and select a permit number for the chosen facility using the drop-down to the right of the facility.

Now that the facility and permit are selected, different report types may be present for the same facility, such as Monthly, Quarterly, Annually, or Semi-Annually, depending on the permit requirements for the facility.

Before a DMR file is generated, a user may wish to preview and print out the reporting requirements, as shown on their paper DMR. To preview or print a DMR, click on the View Form icon for the corresponding month.

This will bring up the following pop-up browser that displays the DMR in a format that is very similar to the paper form.

The form at this point is considered a template, since the permit limits and parameters are listed without actual measured values. To print this template, right click within the pop-up window, and select Print, as shown below.

Step 2: Using the Web Form to Generate the DMR Submission File

To begin filling out the DMR using the online web forms, return to the Create a New Report screen, by clicking on the Create a New Report icon in the functional area to the left.

Select the desired Facility and Permit Number using the drop-downs.

To access a DMR web form, click on the Online Entry icon, for the corresponding Report Frequency and monitoring period.

Clicking on the ✍ icon will bring initiate the Report Wizard.

- **Report Wizard Step 1.** Start the report by choosing a reporting option. To proceed to the online entry form, click Continue, bringing up the online form.

- **Report Wizard Step 2.** Fill out the form.

Similar to the preview, the online web form looks very similar to the paper DMR. The web form is pre-populated with the facility and permit information, report identification, parameter information, and permit limit values. Text fields, check boxes, and drop-downs indicate to the user those areas that he or she is expected to fill in.

It should be noted that at any time the user may save the values that have been entered for this DMR and return at a later time. This can be done by clicking on the Save Current Page button

which is located at the top and bottom of every web form. If the user closes the web form window and logs out of the system, upon his return his data will still be available as he left it. *(Please refer to section 4.3 Editing or Deleting an Open Report for more information.)*

Note: If you leave the DMR entry form without saving your data first, you risk losing any unsaved data that has been entered.

Entering in DMR Results:

Please use the following key for entering in DMR results:

① **Navigating between outfalls (i.e. Monitoring Groups):**

> One facility may have a DMR that spans multiple monitoring groups. In order to completely fill out the DMR form for each monitoring group, navigate between groups using the Monitoring Group drop-down at the top left corner of the web form.
>
> If more than one monitoring group is available, the user can navigate back and forth between monitoring groups by using the drop down menu.

② **No Discharge:**

> For the DMR Summary web form, if no discharge occurred during the monitoring period, check the "No Discharge" checkbox. All the required fields will be filled in with five asterisks (*****).

③ **Quantity or Loading Section:**

> Enter the average (monthly average) and, if appropriate, maximum (or weekly average maximum) quantities in the "reported" fields in the columns marked "Quantity or Loading". The weekly average shall be calculated based on the data collected during a complete week. A complete week is defined as Sunday to Saturday within a calendar month.
>
> For those parameters where the "permit requirement" fields are marked "NL" or a limitation appears, enter data in the "reported" fields in accordance with the

requirements of your permit. "NL" means that there is no effluent limitation for the pollutant parameter but monitoring is required.

Be sure to enter an appropriate data value in accordance with the units listed. Additional data conversion may be necessary, for example, to translate the data from a lab report to the units required to be reported by the permit, as indicated in the form. Note that to calculate the daily mass loading the following formulae should be used:

- o KG/DAY = Concentration (mg/l) x Flow (MGD) x 3.785
- o LB/DAY = Concentration (mg/l) x Flow (MGD) x 8.34

where flow is from the same 24-hour period that the sample was collected

4 **Quality or Concentration Section:**

Enter the minimum, average (monthly average), and/or maximum (or weekly average maximum) in the "reported" fields in the columns marked "Quality or Concentration". The weekly average shall be calculated based on the data collected during a complete week as was indicated above. Be sure to enter an appropriate data value in accordance with the units listed. As was noted above, additional data conversion may be necessary to translate data from a lab report.

As indicated in the bottom of the form, the "reported" fields (textboxes) in the loading and concentration columns will accept only the following pre-defined values:

- o Numbers
- o "NR": Not required
- o "X": No sample results
- o "<QL": Below quantification level
- o "<": Less than (along with a numeric value)
- o ">": Greater than (along with a numeric value)

5 **Excursions:**

Enter the number of samples which do not comply with the maximum and/or minimum permit requirements in the "reported" field in the column marked "No. Ex." (Number of Excursions). Do not include monthly average excursions in this column.

The number of excursions is required to be entered in all cases except when there are no limits for that parameter.

6 **Sample Frequency:**

Select from the dropdown list the actual frequency of analysis for each parameter in the "reported" field in the column marked "Frequency of Analysis". If "Other (Please specify below)" is selected, specify the actual frequency in the specific comment and explanation field, as indicated below.

You are required, at a minimum, to sample at the frequency indicated in your permit. If you monitor any pollutant specifically addressed by the permit more frequently than the permit requires, the results of this monitoring shall be included in the calculation and reporting of the data submitted in this form.

7 Sample Type:
> Select from the dropdown list the actual type of sample collected for each parameter in the "reported" field in the column marked "Sample Type".
>
> You are required, at a minimum, to sample using the sample type indicated in your permit.

8 Bypass and Overflows:
> Record the number of bypasses and overflows that occurred at the wastewater treatment works during the month, the total flow in million gallons (MG) and BOD5 in kilograms (KG) in the proper columns in the section marked "Bypasses and Overflows".

9 Specific Field-by-Field Comments:
> Enter specific comments and explanation in the space provided, where applicable. Reference each comment or explanation by specific row (parameter) and column (quantity, quality, or frequency of analysis) selected from the dropdown list. Then click the Add Comment button to confirm.
>
> Where noncompliance of permit requirements are reported, attach a brief explanation in accordance with the permit requirements describing the cause(s) of the noncompliance, the duration of the noncompliance, including the date(s) the noncompliance began or occurred, and corrective actions taken and to be taken to address the noncompliance. The foregoing information should be provided for each noncompliance noted in this report.

To delete a specific comment, select the parameter and column combination from the drop-downs and click Remove Comment. The page will automatically refresh, and the specific comment selected for removal will be gone.

After clicking Continue, a general comments and operator page will appear:

10 **General Report Comments:**

Enter general report comments and explanation in the space provided, where applicable. Indicate whether an attachment is submitted online, by mail or other methods. If submitting online, note that the maximum attachment file size is 1.5 MB.

General report comments may include an explanation for submitting the report late, extenuating circumstances, etc. If there is more than one outfall for a facility and a general comment such as "Sorry this is late" is entered, the same general comment will appear regardless of which outfall is navigating to.

To change the general report comment at any time, click within the text box and edit as needed.

11 **Operator:**

The operator in responsible charge of the facility should review the completed form and provide the name in the appropriate space on the form. If the facility is required to have a licensed wastewater works operator, the operator's license number shall be reported in the space provided.

- **Report Wizard Step 3.** Attach Files. After completing the form the user has the option of submitting supplemental files to this DMR report.

The user has two options for submitting attachments:

- o **Attach Files Online:** The user can browse for and upload electronic files to the e-DMR server. Each attachment can not be any larger than 1.5 MB.

  Click on the resulting "Add File(s)" button and follow the window will appear.

To locate the file to be attached, use the Browse… button. Then provide a brief description of the file. Only certain file types are allowed to be uploaded.

- o **Submit Attachments by Mail:** If the user does not have an electronic copy of the attachment to submit, or if the file is too large, the user can send in the attachments via mail. The user can provide a description of the attachments that will be mailed so DEQ will know the nature of the attachments that will be expected via mail. Attachments are to be mailed to the appropriate Regional Office. If you intend to mail in the attachment in hard copy form, go to the Submit Attachment(s) by Mail section to find the mailing address. You must print a copy of the Submission Receipt and include it with all attachments you submit by mail.

- **Report Wizard Step 4. Report Review.** At this stage, the user has an opportunity to review the DMR submission prior to certifying the results and submitting to DEQ.

- **Report Wizard Step 5. Report Submission.** The DMR Report certifier must finally read the certification statement, click the checkbox indicating that he or she has read and understands the certification statement, enter in the PIN number supplied by DEQ, and click the Submit button to submit the results to DEQ.

The DMR will then be sent to the DEQ.

4.2.2 Submitting Reports Using the XML File Upload Option

Step 1: Downloading a Copy of Your Reporting Requirements (XML Template)

In the previous section the template, or blank DMR form, was viewed online using the View Form window. If the user is using the XML File Upload submission option, the user can download an XML template of the DMR file by returning to the Create a New Report screen by clicking on the Create a new Report icon in the functional area to the left, Create a New Report which will bring up the following screen.

To download an XML template of the DMR file, click on the Download XML icon, for the corresponding month. This will begin a series of message boxes.
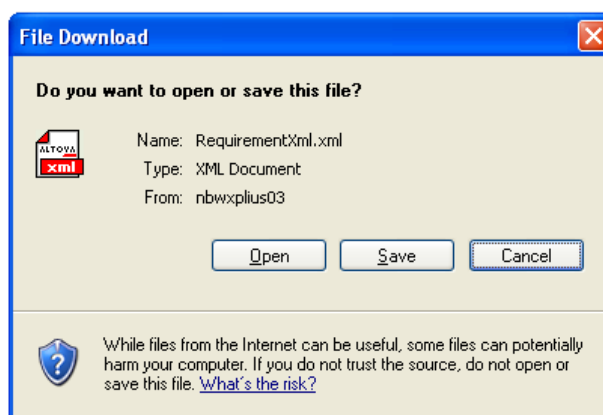
To open the file in a new window without saving, click Open. However, if you wish to download the template DMR XML file, click Save, at which point the user will be prompted to supply the location to which they wish to save the file.
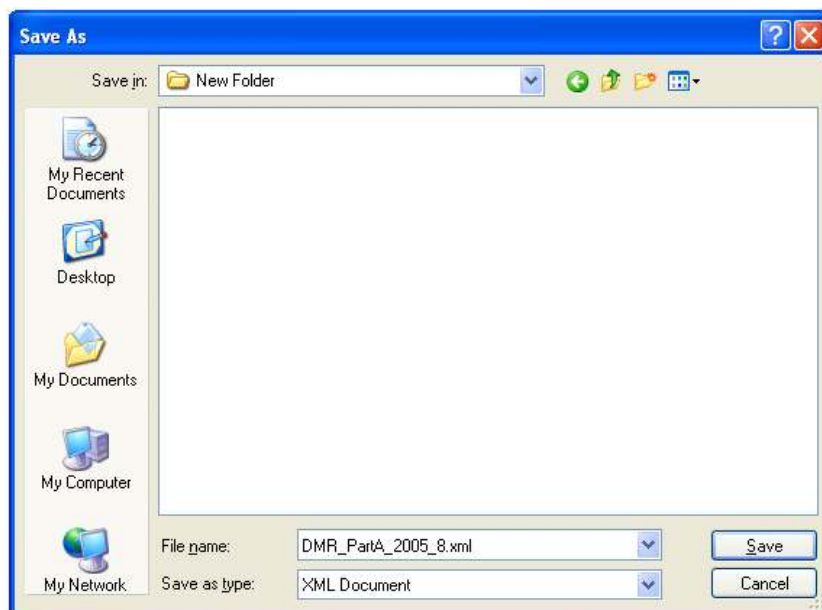
Navigate to the directory where you wish to save the file. Once you have selected a file location and name, click Save.

The file that is downloaded is an XML file that contains the reporting requirements for the DMR, but does not contain the DMR results.

The readable DMR format displayed in the e-DMR system, described in Section 4.2.1, is created by applying a style sheet to the XML that is being downloaded in this section. This type of style sheet is used to display XML, the language adopted to communicate between environmental facilities and agencies, because it is platform-independent.

Clicking on the XML button, or viewing the XML file that is downloaded, allows you to take a peek behind the scenes at the data being displayed.

The following screenshot shows a portion of the XML template file opened using Internet Explorer.

Use the scrollbar at the right side of the browser to see the entire XML template file.

For a clearer picture of the structure of the XML file and how it relates to the standard DMR format, collapse the following data elements, which are shown in red text above and enveloped by < >, by clicking on the   (-) :   MetaData, Receiver, Sender, FacilityIdentification, ReportIdentification, LocationGroupIdentification, Certification, and all but the first MonitoringData.

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSPY v2004 rel. 3 U (http://www.xmlspy.com) by Jason Huang (enfoTech & Consulting Inc.) -->
<eDMR xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="C:\Schema\DMR\20050524_VA_v1.2\EDMR_e-DMR_VA_v1.2.xsd">
    + <MetaData>
    + <Receiver>
    + <Sender>
    - <Submission submissionID="" submissionFileName="" submissionFileCreatedDate="" submissionComment="">
        - <Facility>
            + <FacilityIdentification stateFacilitySystemAcronymName="VA e-DMR" stateFacilityIdentifier="6066">
            - <Report>
                + <ReportIdentification>
                - <MonitoringLocationGroup monitoringLocationName="">
                    + <LocationGroupIdentification monitoringLocationName="">
                    - <MonitoringData>
                        + <ParameterIdentification>
                        + <Laboratory>
                        + <SummaryofMonitoringResult>
                        + <SummaryofMonitoringResult>
                        + <SummaryofMonitoringResult>
                        + <SummaryofMonitoringResult>
                        + <SummaryofMonitoringResult>
                    </MonitoringData>
                </MonitoringLocationGroup>
                + <OperationalData>
            </Report>
        </Facility>
        + <Certification>
        </Certification>
        <Attachments/>
    </Submission>
</eDMR>
```

Now that the structure is well defined, the form can be examined piece-by-piece to see exactly where the data presented using the style sheet is in relationship to the entire XML e-DMR file.

The e-DMR system focuses primarily on the Submission section of the e-DMR file.

The following image highlights a section of the DMR in red, and assigns a section number to it in blue.   The XML is then displayed with the corresponding section number on the following pages.

1 Section 1

```
<FacilityIdentification stateFacilitySystemAcronymName="VA e-DMR" stateFacilityIdentifier="6066">
    <FacilitySite>
        <FacilitySiteName>GM-MFD-Grand Blanc Plant</FacilitySiteName>
    </FacilitySite>
    <LocationAddress>
        <SupplementalLocationText/>
        <LocationDescriptionText/>
    </LocationAddress>
    <MailingAddress>
        <MailingAddressText>One Riverside Plaza</MailingAddressText>
        <MailingAddressCityName>Columbus</MailingAddressCityName>
        <MailingAddressStateName>OH</MailingAddressStateName>
        <MailingAddressZIPCode>43215</MailingAddressZIPCode>
    </MailingAddress>
</FacilityIdentification>
```

2 Section 2

```
<Report>
    <ReportIdentification>
        <PermitNumber>NJ-123</PermitNumber>
        <PermitteeName/>
        <FacilityLimitType>final</FacilityLimitType>
        <FormComment/>
        <ReportType>MONTHLY</ReportType>
        <FacilityReportGroup/>
        <ReportReferenceID>10</ReportReferenceID>
        <ReportStartDate>2005-05-01</ReportStartDate>
        <ReportEndDate>2005-05-31</ReportEndDate>
        <ReportFrequency>Monthly</ReportFrequency>
        <GeneralReportComment/>
        <ReportCreateDate/>
    </ReportIdentification>
```

3 Section 3

```
<MonitoringLocationGroup monitoringLocationName="">
    + <LocationGroupIdentification monitoringLocationName="">
    <MonitoringData>
        + <SummaryofMonitoringResult>
            + <SummaryResult>
        + <SummaryofMonitoringResult>
            + <SummaryResult>
        + <SummaryofMonitoringResult>
            + <SummaryResult>
        + <SummaryofMonitoringResult>
            + <SummaryResult>
        + <SummaryofMonitoringResult>
            + <SummaryResult>
```

4 Section 4

```
<OperationalData>
    <RepresentativeName/>
    <ResponsibilityArea/>
    <Title/>
    <RepresentativeContactInfo>
        <EmailAddressText/>
        <TelephoneNumber/>
        <PhoneExtension/>
        <FaxNumber/>
        <AlternateTelephoneNumber/>
    </RepresentativeContactInfo>
    <CertificationCategory/>
    <CertificationNumber/>
    <CertificationExpireDate/>
    <OperatorRequiredInd/>
</OperationalData>
```

5 Section 5

```
<Certification>
    <CertificationStatement/>
    <Certifier/>
    <CertifierTitle/>
    <CertifierContactInfo>
        <TelephoneNumber/>
    </CertifierContactInfo>
    <CertificationDate/>
</Certification>
```

The data that is populated in the template XML file and used for the preview can be thought of as the data that is needed to create a blank DMR form, ready to be filled out by the corresponding facility. All data that is in the prepopulated template file has been drawn from the agency database to simplify reporting for the facility and to increase accuracy.

The bulk of the DMR data will be in Section 3 - note that the data elements are empty. Since this is the template file, or the blank DMR form, these values will be populated with actual reporting data once the submission XML file has been created by the facility.

Step 2: Populating the XML template file with DMR results

A variety of commercially available software can be used to populate the XML template file that is downloaded from the e-DMR system. A simple text editor such as Notepad or Notepad can be used, or targeted XML data entry software such as Altova XML Spy. However, DMR facilities that prefer the XML submission option typically make this choice because they can configure their existing DMR tracking software to automatically output or convert their DMR results to the e-DMR XML schema format. If your software can be configured or customized to automatically output XML files in the e-DMR format, then this submission option may be the preferred option.

Regardless of the approach used to populate the XML file, the following elements in the XML file will need to be populated prior to submitting the file:

Field	Description	XML Path
ReportStartDate	The first date of the monitoring period.	<Submission> <Facility> <Report> <ReportIdentification> <ReportStartDate>
ReportEndDate	The last date for the monitoring period.	<Submission> <Facility> <Report> <ReportIdentification> <ReportEndDate>
SubmissionFileCreatedDate	The date on which the XML file has been created.	<Submission>
DueDate	The date on which the DMR is due.	<Submission> <Facility> <Report> <ReportIdentification> <DueDate>
ReportCreateDate	The date on which the XML file has been created.	<Submission> <Facility> <Report> <ReportIdentification> <ReportCreateDate>

MonitoringStartDate	The first date of the monitoring period.	`<Submission>`
		  `<Facility>`
		   `<Report>`
		    `<MonitoringLocationGroup>`
		     `<MonitoringData>`
		      `<SummaryofMonitoringResult>`
		      `<SummaryResult>`
		       `<MonitoringStartDate>`

MonitoringEndDate	The last date for the monitoring period.	`<Submission>`
		  `<Facility>`
		   `<Report>`
		    `<MonitoringLocationGroup>`
		     `<MonitoringData>`
		      `<SummaryofMonitoringResult>`
		      `<SummaryResult>`
		       `<MonitoringEndDate>`

CertificationDate	The date on which the file is being uploaded to the state (i.e. certified for accuracy and completeness)	`<Submission>`
		  `<Certification>`
		   `<CertificationDate>`

NoDischargeIndicator	Indicates whether there was no discharge at the outfall during the monitoring period. (Specify Y if there was no discharge; N if there was a discharge.)	`<Submission>`
		  `<Facility>`
		   `<Report>`
		    `<MonitoringLocationGroup>`
		     `<LocationGroupIdentification>`
		      `<NoDischargeIndicator>`

MeasurementValue	Used to provide the value for either the concentration minimum, concentration maximum, concentration average, loading maximum, or loading average result.	`<Submission>`
		  `<Facility>`
		   `<Report>`
		    `<MonitoringLocationGroup>`
		     `<MonitoringData>`
		      `<SummaryofMonitoringResult>`
		      `<SummaryResult>`
		       `<MeasurementValue>`

QCExceedance	Indicates the number of excursions for a particular parameter.
	
	Note:This field is required in all cases except when there are no limits for that parameter.
	
	Only the 1st instance of the 5 blocks of SummaryofMonitoringResult need to be filled in; it is the 1st instance that is used by the eDMR system.
		`<Submission>`
		  `<Facility>`
		   `<Report>`
		    `<MonitoringLocationGroup>`
		     `<MonitoringData>`
		      `<SummaryofMonitoringResult>`
		      `<SummaryResult>`
		       `< QCExceedance>`

ActualSampleFrequency	Indicates the actual sample frequency for each parameter on the DMR	<Submission> <Facility> <Report> <MonitoringLocationGroup> <MonitoringData> <SummaryofMonitoringResult> <SummaryResult> <ActualSampleFrequency>
ActualSampleType	Indicates the actual sample type for each parameter on the DMR	<Submission> <Facility> <Report> <MonitoringLocationGroup> <MonitoringData> <SummaryofMonitoringResult> <SummaryResult> < ActualSampleType>
RepresentativeName	This field is used to supply the operator in responsible charge. This data element is only required if the facility is required to report operator information.	<Submission> <Facility> <Report> <OperationalData> < RepresentativeName >
CertificationNumber	This field is used to supply the Operator Certification number. This data element is only required if the facility is required to report operator information.	<Submission> <Facility> <Report> <OperationalData> < CertificationNumber>

Step 3: Uploading an XML Submission File to the e-DMR System

Once an XML file has been generated and saved locally, the file can be submitted to the e-DMR System. Once the file is submitted, it can be viewed by regulatory agencies and accessed for future reference. To submit the XML file, click on Upload XML Reports icon in the functional menu to the left. This will open the following screen.

To select the XML file, click on the Browse button.

This will bring up the Choose File message box. Browse through the local file directory, and select the file to be uploaded.

Note that the file selected must be a valid XML file. If the file does not have an .xml extension, an error will occur. Also, the file must be an e-DMR schema instance document that must comply with the national e-DMR XML schema file format. A copy of this file format and specifications can be found at the EPA/State Exchange Network website at http://www.exchangenetwork.net . The file must comply with the naming conventions of the data elements, order of the data elements, and data element data type definitions.

Before submitting the e-DMR XML file to DEQ, you may test if the file is well formed and validates against the e-DMR XML schema. This can be accomplished by clicking the Test File button.

If the file is invalid, the specific validation errors will appear above the Select File row. The most common errors are listed below.

(1) The file is not in XML format, for example, the submission file is in word format:

(2) The file is in valid format, but not the correct eDMR type. For example, in DMR section, a DWR report is submitted, the error message will be:

(3) The file is in valid format and correct type, but with some errors, the detailed error messages will be displayed. For example, in the submission XML file, an invalid date was input. The following error message will be generated:

Other Potential Error Messages

Error Message	Potential Cause
No reporting requirement can be found in E2 associated with this xml file.	E2 is not expecting a DMR with the specified start date and end date for this facility. This error is usually encountered when the ReportStartDate and ReportEndDate elements are not specified.
The file you are attempting to upload is invalid.	The XML file has not passed XML schema validation.
The "<" character cannot be included in the name…	This is usually caused by not having the XML file conform to the XML schema, either by having an extra "<" or ">" or omitting an "<" or ">"
The 'date' element is invalid – The value ' ' is invalid according to its datatype.	XML requires that all date fields be supplied. This error message indicates that some date field in the XML fiel has not been filled in.
{elementName} is required	A required field in the XML file (from the table above) was not specified.

The user can correct the errors, and resubmit the file. If the test is successful, the page will indicate that the submission has passed validation. At this point, enter the Personal Identification Number (PIN), read the certification statement, and check the "I Agree" check box. Neglecting to enter the correct PIN, or check the Certification checkbox will prevent the submission from occurring. When finished, click Submit File. A message box will appear to confirm submission. Click OK.

Once the file has been successfully uploaded and validated against the e-DMR schema, a message will appear confirming receipt of the submission; this confirmation number will be stored in the e-DMR system for future reference and should be recorded by the user for future reference.

4.2.3 *Submitting Reports Using the Excel Copy-and-Paste Feature*

In many cases, a facility may store its DMR data electronically in a common spreadsheet software application, such as Microsoft Excel. To blend the simplicity of the web form with the ease-of-use of commonly used spreadsheet programs, there is a copy-and-paste feature available on the DMR web form.

Step 1: Download an Excel Template with Your Facility's Reporting Requirements

To download a DMR template file in Excel file format, return to the Create a New Report screen by clicking on the [ ] Create a New Report icon in the functional area to the left, which will bring up the following screen.

To download a template DMR file, click on the Download Excel icon, [X] for the corresponding month. This will begin a series of message boxes.
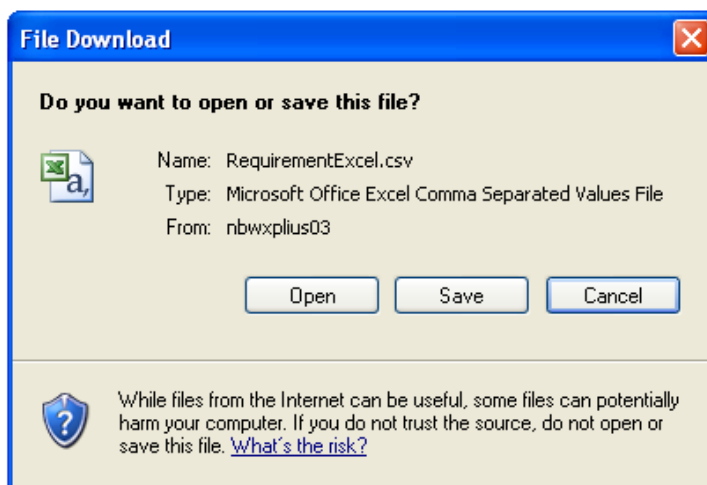
To open the file in a new window without saving, click Open. Alternately, click Cancel if you do not wish to save or open the file.

However, if you wish to download the template DMR Excel file, click Save, at which point the user will be prompted to respond with the location they wish to save the file in.
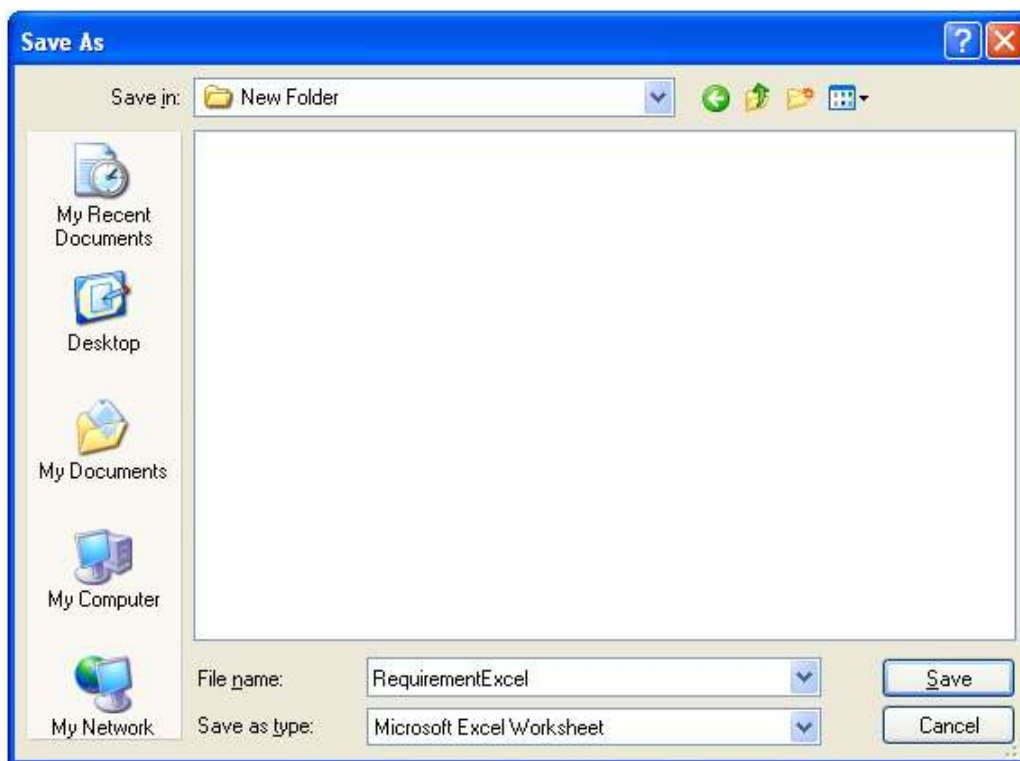
This file is a Comma Separated Value (CSV) file that can be read by Microsoft Excel and other spreadsheet programs. This file contains a listing of the parameters on the left-hand side and the heading of the columns of the DMR form across the top. The facility user can then begin using this Excel spreadsheet to enter in DMR results.

Step 2: Filling out the DMR Form in Excel (or other spreadsheet program)

The CSV file that is downloaded from the e-DMR system can be opened by Excel and most other spreadsheet programs. Once this file is opened, it can be edited in any way as seen fit by the facility, but the **order of the columns should not be modified**. This is because in Step 3, the data will be copied out from the Excel file and pasted back into the e-DMR system webform, which will expect the data in the same order in which it was downloaded.

Step 3: Submitting a DMR Using the Copy-and-Paste from Excel Feature

Once the facility user is finished filling out the Excel spreadsheet, he or she can return to the e-DMR system and go to the Create a New Report screen to submit the report.

To access the DMR web form, click on the Online Entry icon 🖎 for the corresponding month, which will bring up the following page:

Choosing the **Copy and Paste a Report** option and clicking the **Continue** button will open the following page

This page is the same as the online entry page, but brings the user to the bottom of the page which displays a textbox for copying in data. Copying and pasting data allows for standardization of data, reducing the degree of error that may occur by retyping the data. To use the copy and paste conversion tool, there are a few rules that must be followed.

1. The order of the parameters in each row and the order of columns of the locally saved spreadsheet must be in the same order as those on the DMR Data web form.

2. Only the body of the DMR form may be copied. This does not include the parameter row headings, columns headings, operator section, or comments section. These values must be entered manually.

Looking first at the first rule, examine the web form parameters, paying attention to their order as listed across the page. The following figure zooms in on this area.
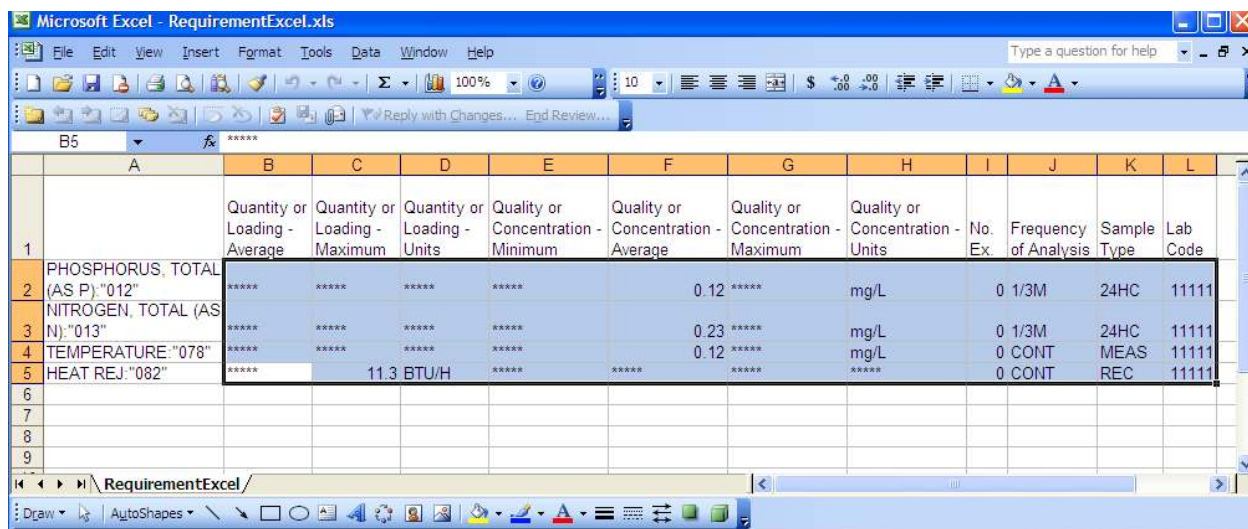
Next, open the spreadsheet software that stores the DMR Data. Verify that the parameters listed are the same as those on the web form, and that the order matches exactly (which will be true by default). This may take some time to set up, but it need only be done once. The following image illustrates this.
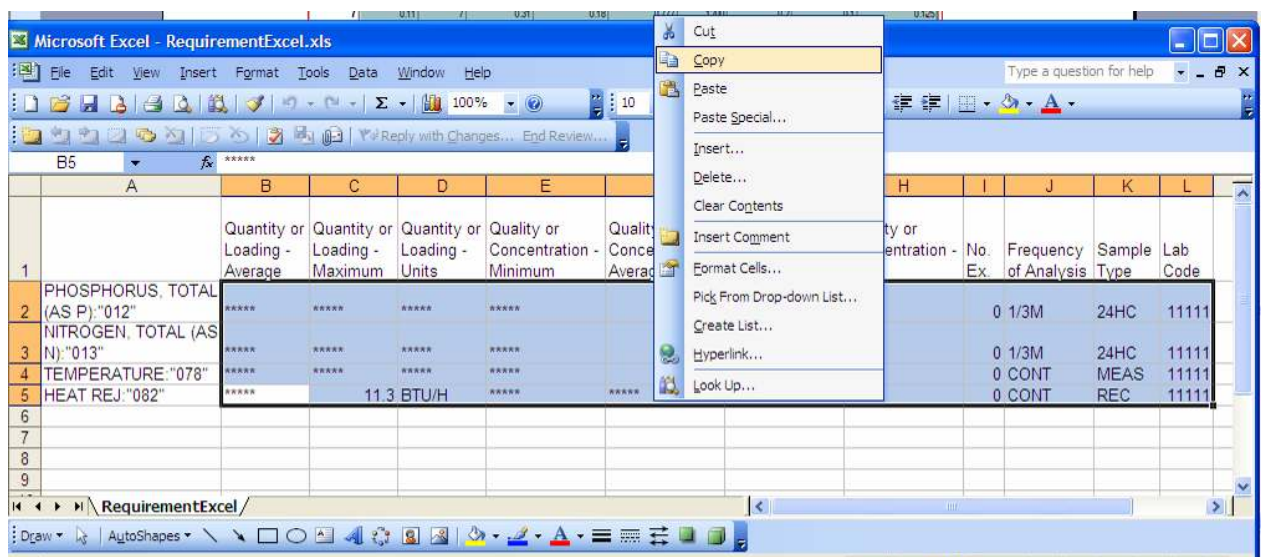

In this case, the parameters are identical and in the same order, and the column order is the same across the top of the spreadsheet.

For example, DMR data for December is highlighted in the following spreadsheet. Note that only the data itself is selected.

Copy the selected cells using CRTL-C, by right clicking and selecting Copy.

Make sure that the parameters, column headers, or extra columns to the right are not selected and copied.

Back in the e-DMR system, inside of the text box beneath the Copy and Paste the Report box, right click and select paste.

This will paste the tab delimited data that had been copied from the locally saved spreadsheet.

To populate the DMR web form with this copied and pasted data, click the **Convert** button.

If the data is copied into the box incorrectly, click the **Clear** button to remove the contents from the box.

Note: If the permit contains multiple outfalls, only one outfall can be pasted at a time. Clicking the continue button will bring up another screen which will allow the user to paste in the data for the each subsequent outfall, until all outfalls are populated.

> **Note:** In some cases, facilities with multiple-outfall DMRs have encountered problems while pasting where some Sample Types are not pasting in as expected. This has been limited to situations where:
>
> - Multiple-outfall DMR
> - Facility does not supply a Lab Code
>
> If you meet these conditions and are encountering problems pasting in Sample Types, please refer to the Troubleshooting Section at the end of this document.

The DMR form will be displayed with the fields populated from the copy-and-paste step; verify that the correct data are in the appropriate web form fields.

Complete the DMR web form by filling in the other fields that could not be pasted such as bypass and overflows and comments. For detailed instructions on filling out the online entry form, please refer back to section 4.2.2.

It should be noted that, at any time, the user may save the values that have been entered for this DMR and return at a later time. This can be done in two ways, either by clicking on the Save current page button which is located at the top and bottom of every web form,

Note: If you leave the DMR entry form without saving your data first, you risk losing any unsaved data that has been entered.

Or the user can click Continue which will save the current data and take the user to the next Monitoring Point. If the user closes the web form window, and logs out of the system, upon return, the data will still be available as it was left.

At this point, the user can continue through the steps of the **Report Wizard**. For a detailed description of the Report Wizard process, please see section 4.2.1 of this document.

4.3   Editing or Deleting an Open Report

As stated above in the section on creating new reports, the user has the option of saving their work at any time during the creation process. To continue work on an open report, click on the "Edit an Open Report" icon in the functional area to the left.

By entering the appropriate search criteria the report that needs to be edited can be found.

Each open report will have a corresponding Report ID listed.[2]

4.3.1   Editing an Open Report

To edit a report select the Edit icon, ![edit icon] . The user is then given the option of editing the DMR form or the report's attachments.

---

[2] This Report ID is an ID that is used until the report is submitted. When the report is certified and submitted, a new Submission ID will be generated for the DMR.

To edit a form select Edit Form and press the Continue icon located in the lower right section. This will open the saved form.

The user can than proceed as in Section 4.2.1 to continue filling out the report.

To edit a report's attachments select Edit Attachments and press the Continue icon located in the lower right section. This will bring the user to the Submit Attachment(s) screen.

The user can than proceed as in Section 4.2.1 to submit the attachments.

4.3.2 *Deleting an Open Report*

A report that has been started but has not yet been certified and submitted to DEQ can be deleted by selecting the delete icon, [x] . Note that reports that have been certified and submitted to DEQ cannot be deleted. If corrections are necessary, a revision must be made.

Edit	Delete	Report ID	Report Type	Permit Number	Facility Name	Report Frequency	Last Updated Date
✍	⊗	53	MONTHLY	NJ-456	Legends Mfg Inc	Quarterly	6/7/2005 5:20:14 PM
✍	⊗	81	CRUISESHIP	NJ-567	GM-MFD-Grand Blanc Plant	Monthly	6/9/2005 7:48:45 PM
✍	⊗	82	CRUISESHIP	NJ-567	GM-MFD-Grand Blanc Plant	Monthly	6/9/2005 8:05:42 PM
✍	⊗	83	CRUISESHIP	NJ-567	GM-MFD-Grand Blanc Plant	Monthly	6/9/2005 8:06:57 PM
✍	⊗	84	CRUISESHIP	NJ-567	GM-MFD-Grand Blanc Plant	Monthly	6/9/2005 8:36:51 PM
✍	⊗	36	CRUISESHIP	NJ-567	GM-MFD-Grand Blanc Plant	Monthly	6/6/2005 12:19:19 PM
✍	⊗	7	CRUISESHIP	NJ-567	GM-MFD-Grand Blanc Plant	Monthly	5/31/2005 10:47:18 AM
✍	⊗	41	CRUISESHIP	NJ-567	GM-MFD-Grand Blanc Plant	Monthly	6/6/2005 3:38:32 PM
✍	⊗	40	CRUISESHIP	NJ-567	GM-MFD-Grand Blanc Plant	Monthly	6/6/2005 2:45:05 PM
✍	⊗	42	CRUISESHIP	NJ-567	GM-MFD-Grand Blanc Plant	Monthly	6/6/2005 4:28:03 PM

1 2 3 4 5   Total Records: 47

4.4   Processing and Notification of Submissions

Each time a DMR is submitted, a submission receipt will be displayed that can be printed out for future reference, as shown here:

In addition, a confirmation will be sent via email, along with follow-up messages indicating the processing status of the submission.

It is strongly recommended that if the user is submitting using the Excel or XML submission option, that template DMR Excel or XML files be downloaded from e-DMR System only, since the application has been designed to map the correct data from the agency database to the corresponding data element. If the system is expecting a value in a particular data element, it may not be able to correctly display the XML using a style sheet, or the file may not validate. The best way to ensure that a submission will be accurate and uploaded correctly to the e-DMR Server is by utilizing the web form, and then stepping through the e-DMR Wizard for submission.

4.5   Viewing and/or Revising Past Submissions

4.5.1   *Viewing Past Submissions*

After a file has been submitted to the e-DMR Server, it is accessible for viewing at any time. To view a DMR submission, click on the Submittals/Revisions icon in the left functional area. This will open the following screen.

To view a DMR submission, first select a facility by selecting from the drop-down menu.

Next select the submission date range. You may enter date search criteria by either typing in the date in MM/DD/YYYY format, or by clicking on the calendar to the right of the date field . Click on the day to select the date and close the Calendar window. Using the Calendar pop-up ensures that the date format is correct to query the e-DMR database for submissions.

Once the search criterion is entered, click on the Search button, which will display a listing of your past submissions.

The user can use this screen to monitor the current status of the submission. For example, when the DMR is first submitted, its status will be "New Submission is Received", but after DEQ has validated the submission, its status will change to either "Exchanged" or "Report is Rejected by Program Staff".

To select a report for viewing, go to the desired DMR submission and click on the Detail icon . This will display a report summary for the submission. bring the user to the following screen.

The certifier's login name as well as the Internet Protocol (IP) address of the machine from which the submission is made is displayed. The Date and time the file was uploaded will only be available if the file was uploaded using the Submit Reports screen. If there is no information displayed, it is evident that the file was generated and submitted using a web form and the e-DMR Submission Wizard. The atomic dates listed are in Coordinated Universal Time.

This screen also displays the date that confirmation was sent. Also listed is the Submission ID of the submitted file. The last piece of information is the checksum validation. The

checksum validation is a mathematical validation performed to make sure that the file on the server is the same as the one submitted. This prevents tampering with the files, and is another security feature of the e-DMR System.

CRC No, which stands for Cyclic Redundancy Check, is used to track the changes of the original document or XML file submitted to the e-DMR system. In the e-DMR System, once the user submits a report, the system will calculate the CRC number, and the user can use this to confirm that the submission file has not been altered by the system in any way.

You can view the submission by clicking on the View Report icon [View Report] .

		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Parameter		Average	Maximum		Minimum	Average	Maximum				
Flow	Sample Measurement	*****	*****		*****	*****	*****		0	*****	*****
PARAM CODE: 50050 Mon. Site No.: 001A Stage Code: 1	Permit Requirement	(report) Maximum Monthly Average	(report) Maximum Daily	MGD	*****	*****	*****	*****		Daily	Recorded Daily Flow
Total Residual Chlorine	Sample Measurement	*****	*****	*****	*****	*****	*****	mg/l	0	*****	*****
PARAM CODE: 50060 Mon. Site No.: 001A Stage Code: 1	Permit Requirement	*****	*****		*****	*****	0.038 Maximum Daily			3X Weekly	Grab

Alaska State Department of Environmental Conservation Monthly Discharge Monitoring Report (D

PERMITTEE NAME: Kenai Fire Training Facility   PERMIT NUMBER: 2003DB025   DISTRICT:
MAILING ADDRESS: 210 Fildalgo Ave   MONITORING POINT: 001A   COUNTY:
Kenai, AK 99611
FACILITY: Kenai Fire Training Facility
LOCATION: 450 Marathon Road   Monitoring Period : 2004-07-01 To: 2004-07-31   NO DISCHARGE FROM
Kenai, AK 99611

The Form displays the submitted DMR XML in a format that is very similar to a completed paper form. The form at this point is considered a completed discharge monitoring report, since the permit limits and parameters are listed with their corresponding actual measured values.

The readable format is accomplished by using a style sheet. This type of style sheet is used to display XML, the language adopted to communicate between environmental facilities and agencies because it is independent of platform. In order to understand any type of message, common definitions and rules must be adopted and enforced, which is where the XML Schema specific to discharge monitoring reporting, the e-DMR schema, comes into play.

To view the XML report click on the Download XML icon ![Download XML]. This report allows you to take a peek behind the scenes at the data being displayed.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
- <eDMR xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:noNamespaceSchemaLocation="../../CONFIG/SCHEMA/DMR/V1/EDMR_E-DMR_V1.XSD">
  - <MetaData>
      <SchemaIdentification>e-DMR Schema version 1.0</SchemaIdentification>
      <SchemaDescription>e-DMR Work Group Schema version 1.0</SchemaDescription>
      <SchemaPurpose>Electronic Discharge Monitoring Report submissions</SchemaPurpose>
      <SchemaVersion>1</SchemaVersion>
      <SchemaCreateBy>e-DMR XML Schema Work Group</SchemaCreateBy>
      <SchemaCreateDate>2002-02-28</SchemaCreateDate>
      <SchemaLastUpdateBy>e-DMR XML Schema Work Group</SchemaLastUpdateBy>
      <SchemaLastUpdateDate>2002-02-28</SchemaLastUpdateDate>
      <SchemaContactInformation>leopard.matthew@epa.gov, and
        Edmr_support@enfotech.com</SchemaContactInformation>
    </MetaData>
  - <Receiver>
      <AgencyName>Alaska State Department of Environmental Conservation</AgencyName>
      <ReceivercontactName>Division of Air and Water Quality</ReceivercontactName>
      <ReceivercontactTitle />
    - <ReceiverMailAddress>
        <MailingAddressText>555 Cordova Street</MailingAddressText>
        <SupplementalAddressText />
        <MailingAddressCityName>Anchorage</MailingAddressCityName>
        <MailingAddressStateUSPSCode>AK</MailingAddressStateUSPSCode>
        <MailingAddressStateName>Alaska</MailingAddressStateName>
        <MailingAddressCountryName>USA</MailingAddressCountryName>
        <MailingAddressZIPCode>99501</MailingAddressZIPCode>
      </ReceiverMailAddress>
    </Receiver>
  - <Sender>
      <SenderName />
    - <SenderPhoneFaxEmail>
        <TelephoneNumber />
      </SenderPhoneFaxEmail>
    - <SenderAddress>
        <MailingAddressText />
        <MailingAddressCityName />
        <MailingAddressStateName />
```

By clicking Save, the user can save the XML file locally.

4.5.2 Making DMR Revisions

After a DMR is submitted to DEQ, the facility can use the e-DMR system to make revisions to the DMR and resubmit. However, when a revision is made, the user must supply a reason for making the revision. Revisions will not be automatically processed by the e-DMR system and instead will be manually reviewed by DEQ staff. Because of this, the facility may not receive an indication of Acceptance or Rejection as quickly as with an original submission.

To make a revision to a previously submitted DMR, the user can click on the Revision tab of the Report Summary screen, as shown below:

The user will first be prompted to enter in a reason for making the revision. If the DMR form spans multiple outfalls, the facility must specify in the comments the outfall(s) that are being modified. Then click the Revise button to continue.

The revision must be submitted using the same submittal method that was used for the original. So for example, if the original DMR was submitted using XML file upload, the revision must also be submitted using XML file upload.

The user can then continue to go through the Reporting process. The reporting process from this point on will be the same as described in Section 4.2.

5   Glossary

Acronym/ Terminology	Description
Virginia DEQ	State of Virginia Department of Environmental Quality
DMR	Discharge Monitoring Report
e-DMR	Electronic Discharge Monitoring Report
XML Schema	An XML is a document that is used to standardize a set of mark-up tag names in a particular order. This definition includes what data elements are expected, the acceptable values for the data element, etc. Taken as a whole, the schema is a definition file that provides a mechanism for both human and computer interpretation of information contained in a document.
e-DMR Schema	The electronic Discharge Monitoring Reporting schema file(s) that provides validation rules for interpreting the e-DMR data files written in the XML format. It is used as a guideline for the wastewater facility to prepare electronic DMR data files in the compatible XML file format to the appropriate agency.
XML File / Instance Document	An XML file is an instance of the schema definition file. It will be prepared by the wastewater discharge facility to provide actual monitoring data for submission to the regulatory agency. The wastewater facilities could either develop a data export program to automatically export the DMR data from their databases to the XML file format compatible with the schema definition, or enter the DMR data through a web-form provided by the regulatory agency.
Template DMR File	XML file or instance document of the e-DMR schema that includes reporting requirements, permit limits, and facility information data. This file may be used to fill in actual measured data and is analogous to a blank DMR paper form.
Submission DMR File	XML file, or instance document of the e-DMR schema with actual data, reporting requirements, and certification information. This XML will be submitted to the regulatory agency.
Style Sheet	A style sheet is an XML file that contains language, linking and style. The main purpose of the style sheet is: (1) to display the XML data files in a user-friendly report format, and (2) to transform the data from one XML format to another format (for data conversion or loading to other database systems). In the e-DMR System a style sheet is used to transform XML data into a readable format. A style sheet that is applied to a template file will look like a blank DMR paper form, while a style sheet that is applied to a submission file will appear as a completed DMR paper form.
Report Wizard	A process that begins after a user clicks on Generate Submission File on an online web entry form. This wizard is used to guide the user through certifying and submitting a generated submission file. Also, the wizard can be used to save the file locally.

6   Appendix A: Troubleshooting Guide

6.1   Issue: Attempting to Perform Copy-Paste from Excel into DMR, Results in Some Sample Types Not Pasting Properly

Symptom: You are performing a paste operation from Excel into the DMR webform, but some Sample Types are not pasting into the cells even though they appear correctly in Excel. System will not let you continue.

Scope: This issue is most likely limited to situations involving multiple-outfall DMRs in which the facility is not providing Lab Codes.

Cause: This is caused by a bug in Excel in being able to correctly interpret certain CSV (comma separated variable) files. When using Excel to edit the DMR file, if values are not supplied in the last cell of the last row, Excel will sometimes remove those columns entirely. Therefore in cases where the Lab Code (which is the last column) is not being filled in, Excel removes the lab code column from the CSV file, which creates problems when trying to read the previous column (Sample Type).

Resolution: To avoid this issue, the Data Submitter can add an "X" (or any other character) to the Lab Code column in the row following the last row in the DMR template, as shown here. By making this change, this issue should be resolved.